

June 25, 2003

TO: Internal File

FROM: Priscilla Burton, Environmental Scientist III/Soils, Team Lead

RE: Star Point Waste Fuel Mine Permit Application, Sunnyside Cogeneration Associates Inc., Star Point Waste Fuel Mine, C/007/042-PM02A-2

SUMMARY:

This review follows the information received on June 13, 2002 for the Star Point Waste Fuel application. Three deficiencies identified in TA_PM02A-1 have been adequately addressed as discussed below. Bonding and liability insurance is also discussed.

TECHNICAL ANALYSIS:

GENERAL CONTENTS

IDENTIFICATION OF INTERESTS

Regulatory Reference: 30 CFR 773.22; 30 CFR 778.13; R645-301-112

Analysis:

Section 112.230 indicates that the Abandoned Mine Reclamation Fees will be paid by Sunnyside Cogeneration Associates' Plant Manager. The Permittee anticipates that an exemption from payment of these fees will be granted in the near future (see correspondence in Exhibit 112.230a), similar to the exemption granted in 1994 for the material obtained from the Sunnyside Mine Wash Plant.

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Finding:

The information provided meets the Identification of Interest requirements of the Regulations.

RECLAMATION PLAN

POSTMINING LAND USES

Regulatory Reference: 30 CFR Sec. 784.15, 784.200, 785.16, 817.133; R645-301-412, -301-413, -301-414, -302-270, -302-271, -302-272, -302-273, -302-274, -302-275.

Analysis:

Post mining land use is described in Section 412.200 and Table 412.100a as wildlife, grazing and recreation. Land owners (BLM and PMC) have concurred with the post mining land use, see Exhibit 412.200a. Management plans (required by R645-301-412.120) are synonymous with the reclamation plan for the site. The plan indicates that the timing and extent of grazing use will be made after bond-release by the land owner(s). A portion of the site falls within the BLM Wattis Grazing Allotment and will be managed by that agency. Apparently the allotment includes 3,500 acres of Public Land with an allocation of about 100 Animal Unit Months (AUM's) (Section 411.120). Recent letters of concurrence with the post mining land use from all land owners are found in Exhibit 412.200a.

Findings:

The information provided meets the Post Mining Land Use requirements of the Regulations.

BACKFILLING AND GRADING

Regulatory Reference: 30 CFR Sec. 785.15, 817.102, 817.107; R645-301-234, -301-537, -301-552, -301-553, -302-230, -302-231, -302-232, -302-233.

Analysis:

General

Under the Final Reclamation scenario, there will be no subsoil left stockpiled at final reclamation (Section 542.700, page 500-32 and personal communication with Scott Carlson, May 23, 2003).

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Less substitute topsoil cover is not acceptable for the Final Reclamation Scenario for the following reasons:

- The entire soil profile was removed from the site (down to eighty four inches) as reported on page 6 of Appendix 8-3 of Exhibit 222. The type of material beneath the salvaged soil was not indicated in the Star Point Mine Plan, but would likely be bedrock or strongly alkaline (pH 9.0) layers like the C2ca horizon or strongly cemented layers (Appendix 8-3 of Exhibit 222).
- Soil exposed after 50 years of burial beneath 100 feet of refuse is likely to be severely compacted. The plan to rip to a depth of twenty-four inches and cover with twelve inches of subsoil will provide a rooting depth of 12 to 36 inches. Such a shallow soil interfacing with a compacted zone beneath will limit root penetration and curtail plant growth, affecting diversity.
- Leachates from the refuse may have penetrated into the buried soil foundation making unsuitable growing conditions within the rooting zone described above.
- Regulation 645-301-242.100 and the Performance Standards of R645-301-250 require the Division to ensure that the topsoil material removed and stockpiled is replaced is redistributed over the disturbed area.

Consequently, the Division has required that all the 235, 000 cu yds of substitute topsoil are returned to the disturbed area under the Final Reclamation Scenario. The narrative in Section 542.700 reflects this requirement of Regulation R645-301-242.100.

Findings:

The information provided meets the general Backfilling and Grading requirements of the Regulations.

TOPSOIL AND SUBSOIL

Regulatory Reference: 30 CFR Sec. 817.22; R645-301-240.

Analysis:

Redistribution

- Maps 542.200d shows the existing and final contours of the subsoil storage area under both Bonding and Final Reclamation Scenarios.

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The proposed reclamation contours of Maps 542.200c and d are based on the aerial photography taken in 1976, described on page 500-30 of the application and from the exploration conducted in 2001 (Exhibit 624.210a, personal communication with Scott Carlson, May 9, 2003). Map 542.200e illustrates the final contours of the subsoil pile and refuse pile for the final reclamation scenario.

Reclamation of the refuse under the Bonding Scenario will require 235,000 loose cubic yards of substitute topsoil (Table 542.200b). Map 542.200c shows the existing and final contours of the topsoil storage area under the Bonding Scenario. Reclamation cross-sections for this scenario are shown in Map 542.200d.

Under the Final Reclamation Scenario, the Applicant will explore underneath the refuse pile for suitable substitute topsoil at reclamation (Section 224). Specific locations identified for evaluation as substitute topsoil are mentioned in Section 233. Table 542.200a itemizes the reclamation cut/fill volumes.

Findings:

The information provided in the application meets the minimum Topsoil Redistribution requirement of the regulations.

CONTEMPORANEOUS RECLAMATION

Regulatory Reference: 30 CFR Sec. 785.18, 817.100; R645-301-352, -301-553, -302-280, -302-281, -302-282, -302-283, -302-284.

Analysis:

General

R645-301-553 requires that surface mining will be followed by rough backfilling and grading within 60 days or not more than 1500 linear feet. The application indicates that the 75 acre site will be treated as a single unit and the rough backfilling and grading of the site will be accomplished at completion of mining.

Findings:

The information provided meets Contemporaneous Reclamation requirements of the Regulations.

REVEGETATION

Regulatory Reference: 30 CFR Sec. 785.18, 817.111, 817.113, 817.114, 817.116; R645-301-244, -301-353, -301-354, -301-355, -301-356, -302-280, -302-281, -302-282, -302-283, -302-284.

Analysis:

Revegetation: Standards For Success

The Division recommended deleting nitrogen fertilizer and favored inclusion of nitrogen fixing species in the seed mix. The final reclamation seed mix itemized in Table 341.210a includes northern sweetvetch, mountain mahogany, and Antelope bitterbrush which all fix nitrogen to varying degrees.

Findings:

Information provided in the application meets the minimum Reclamation Plan Revegetation Performance Standard requirements of the regulations.

BONDING AND INSURANCE REQUIREMENTS

Regulatory Reference: 30 CFR Sec. 800; R645-301-800, et seq.

Analysis:

Form of Bond

The Permittee will post collateral bonds (R645-301-860.200).

Determination of Bond Amount

The Division reviewed the information for reclamation cost estimates in Exhibit 830.100a of the Application. The calculated bond amount is \$1,254,000, as stated on page 800-2 of the Application. The submittal also indicates that the bond will be posted after approval of the Application, but before the permit is issued (Section 830).

Terms and Conditions for Liability Insurance

An outdated liability insurance policy certificate is found in Exhibit 117.100a. The insured is SCA, with PMC also listed as an additional insured. The property is identified as that

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in Township 15 South Range 8 East (Star Point Waste Fuel location). The issue date is 1/25/02. The policy does not include the Rider required by 890.300.

Findings:

The information provided does not meet the Bonding and Insurance requirements of the Regulations. Prior to permit issuance, the Permittee must provide the following information in accordance with:

R645-301-860.200, The collateral bonds must be received by the Division before the permit can be issued.

R645-301-890, The liability insurance certificate for the year 2003 must be received by the Division and must include the Rider required by R645-301-890.300, before the permit can be issued.

RECOMMENDATIONS:

The bond has been fixed at \$1,254,000. The application is recommended for approval, but the permit should not be issued without receipt of collateral bonds and a current liability insurance certificate with the Rider required by R645-301-890.300.